

ABSTRACT OF DISCLOSURE

A high capacity alkaline storage battery which exhibits a maintained dischargeability and a reduced excess negative electrode capacity by decreasing the content of γ -NiOOH left in higher order positive active material. To an aqueous solution of a mixture of nickel sulfate, zinc sulfate and cobalt sulfate was gradually added an aqueous solution of sodium hydroxide with stirring to cause the crystallization of nickel hydroxide. Nickel hydroxide thus crystallized was washed, dehydrated, and then dried. To nickel hydroxide was then added dropwise a predetermined amount of an oxidizing agent (NaClO) while being stirred in an aqueous solution of sodium hydroxide which had been kept to a predetermined temperature so that nickel hydroxide as a main component was put in higher order (e.g., average valence is raised to 2.8). Subsequently, to the material was added dropwise a predetermined amount of a reducing agent (H_2O_2) so that the higher order nickel hydroxide as a main component was reduced (e.g., average valence is lowered to 2.2). Nickel hydroxide was washed, dehydrated, and then dried to obtain a higher order nickel hydroxide active material (positive active material).